Adiba Mahbub Proma

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LinkedIn ‖ Personal Website

+1 585-512-4470

EDUCATION

Doctor of Philosophy in Computer Science   2021-Present
University of Rochester, Rochester, NY, USA
Field: Human-Computer Interaction (**Advisor:** Dr.Ehsan Hoque)
Research Interests: HCI, ML, Network Analysis, Social Media, Climate Change

Bachelor of Science in Computer Science and Engineering   2016-2019
BRAC University, Dhaka, Bangladesh
CGPA: 3.97/4
Thesis topic: Ensemble Learning, Classification

EXPERIENCE

Research Assistant, University of Rochester   2021-Present
Field of Interest:

- Designing interface-based and recommendation algorithm-based intervention strategies to reduce polarization in social media platforms

- Re-designing interfaces to facilitate eco-friendly consumption in online platforms

Research Assistant, Can-Aware: Interactive system for breast cancer screening and awareness   2018-2021
Contributions:

- Developed an algorithm for risk assessment and early detection of breast cancer

- Conducted literature review, and designed user studies to validate the algorithm

- Conducted feasibility analysis to develop and design web-platform functionalities [Check Website]

Intern, Tech for Development Unit, BRAC Skills Development Program, BRAC Bangladesh   Feb 2020-Jul 2020
BRAC SDP is an initiative by BRAC NGO to boosts informal sector job placements
Contributions: Designed an intelligent system for the field-level operations team to predict loan eligibility using ensemble learning

TECHNICAL SKILLS

Programming Languages: Python, Java, ReactJS, Javascript, HTML, CSS
Frameworks/Platforms: Pandas, Numpy, Matplotlib, TensorFlow, PyTorch, OpenCV, Scikit-learn, Keras

PRESS

A. Proma, R. Wachter, E. Hoque. **The Untapped Potential of Computing and Cognition in Tackling Climate Change**, NAE Perspectives, 2023

PUBLICATIONS

A. Proma, M. S. Islam, S. Ciko, R. A. Baten, E. Hoque. **NADBenchmarks – a compilation of Benchmark Datasets for Machine Learning Tasks related to Natural Disasters**. The Role of AI in Responding to Climate Change, AAAI Fall Symposium Series, 2022 [Publication]

M. S. Islam, **A. Proma**, Y. Zhou, S. N. Akter, C. Wohn, E. Hoque, **KnowUREnvironment: An Automated Knowledge Graph for Climate Change and Environmental Issues**, The Role of AI in Responding to Climate Change, AAAI Fall Symposium Series, 2022 [Publication]

M. S. Islam, **A. Proma**, C. Wohn, K. Berger, S. Uong, V. Kumar, K. S. Korfmacher, and E. Hoque, **SEER: Sustainable E-commerce with Environmental-impact Rating**, Cleaner Environmental Systems, 2023 [Publication]

S. Kelty, R. A. Baten, **A. M. Proma**, E. Hoque, J. Bollen, and G. Ghoshal, **Don't Follow the Leader: Independent Thinkers Create Scientific Innovation**, arXiv., 2023 [Preprint]

TEACHING EXPERIENCE

Teaching Assistant, University of Rochester   Sep 2021-Dec 2022
Courses conducted: Human Computer Interaction (CSC-212/412), Undergraduate Problem Seminar (CSC200H), Database Systems (CSC261)

Contractual Lecturer, BRAC University   Jan 2020-Dec 2020
Courses conducted: Introduction to computing(CSE101), Data Structures(CSE220), Algorithms(CSE221), Microprocessors(CSE341), Compilers(CSE420)

Student Tutor, BRAC University   May 2018-Aug 2019
Courses conducted: Programming Language I (CSE161- Basic Programming in Java), Data Structures (CSE220), Digital Logic Design (CSE260)

RECOGNITION

Selected for CRA-WP Grad Cohort, 2023
Selected for CRA-WP Grad Cohort, 2022
Funding for CanAware project from ICT division of Ministry of Posts, Telecommunications and Information Technology, Bangladesh, 2018

AWARDS AND HONORS

Highest Distinction, BRAC University
Awarded to students graduating with CGPA greater than 3.8
Vice Chancellor's list, BRAC University   Awarded for 8 semesters
Awarded to students with GPA greater than 3.9
Dean's list, BRAC University   Awarded for 2 semesters
Awarded to students with GPA between 3.70 - 3.89
Performance-based scholarship, BRAC University   2017-2019
75 per cent tuition-waiver
Merit-based scholarship, BRAC University   2016-2017
70 per cent tuition-waiver
Country highest in Mathematics in IAL, 2014 Daily Star Awards
World Highest in Mathematics-B in IGCSE, 2013 Edexcel Awards